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DATE(S) ISSUED:

11/3/2010

SUBJECT:

Vulnerability in Internet Explorer Could Allow Remote Code Execution

OVERVIEW:

A new vulnerability has been discovered in Microsoft's web browser, Internet Explorer, which could allow an attacker to take complete control of an affected system. Exploitation may occur if a user visits or is redirected to a web page which is specifically crafted to take advantage of the vulnerability. Successful exploitation of this vulnerability could result in an attacker gaining the same privileges as the logged on user. Depending on the privileges associated with the user, an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights.

It should be noted that there is currently no patch available for this vulnerability and there are reports that it is being exploited for targeted attacks.

SYSTEMS AFFECTED:

- Internet Explorer 6
- Internet Explorer 7
- Internet Explorer 8

RISK:**Government:**

- Large and medium government entities: **High**
- Small government entities: **High**

Businesses:

- Large and medium business entities: **High**
- Small business entities: **High**

Home users: High

DESCRIPTION:

A new vulnerability has been discovered in Microsoft's web browser, Internet Explorer, which could allow an attacker to take complete control of an affected system. This issue arises when a certain combination of Cascading Style Sheet (CSS) tags are stored which may result in a use-after-free condition. A use-after-free condition occurs when an application deallocates a memory block and then later attempts to access that deallocated space.

Exploitation may occur if a user visits or is redirected to a web page which is specifically crafted to take advantage of these vulnerabilities. Successful exploitation of the vulnerability could result in an attacker gaining the same privileges as the logged on user. Depending on the privileges associated with the user, an attacker could then install programs; view, change, or delete data; or create new accounts with full user rights.

It should be noted that there is currently no patch available for this vulnerability and there are reports that it is being exploited for targeted attacks.

RECOMMENDATIONS:

The following actions should be taken:

- Consider implementing the following workarounds as listed by Microsoft:

- Override the Web site CSS style with a user defined CSS.
- Deploy the Enhanced Mitigation Experience Toolkit.
- Enable Data Execution Prevention for IE 7.
- Read email in plain-text format.
- Set Internet and Local Intranet security zone settings to “high” to block ActiveX controls and Active Scripting.
- Run all software as a non-privileged user (one without administrative privileges) to diminish the effects of a successful attack.
- Inform and educate users regarding the threats posed by hypertext links contained in emails or attachments especially from un-trusted sources.
- If you have an alternate browser deployed, consider using it until this vulnerability is remediated.

REFERENCES:

Microsoft:

<http://www.microsoft.com/technet/security/advisory/2458511.msp>

CVE:

<http://www.cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2010-3962>

Symantec:

<http://www.symantec.com/connect/blogs/new-ie-0-day-used-targeted-attacks>

SANS:

<http://isc.incidents.org/diary.html?storyid=9874>

Security Focus:

<http://www.securityfocus.com/bid/44536>